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ABSTRACT

Though librarians have always recognized the need to educate users in the two broad areas of library skills--location of resources and their use--there is little research on how such instruction can be best done. Theories that do exist seem far different from actual practice. Both practitioners and writers agree on one point: library skills should be taught as they are needed by the student. Whether this functional instruction should be "formal" or "informal" is a matter of debate among librarians. Location skills are invariably stressed by librarians in instructional programs. The main location tools are the card catalog, the library's classification system, and published indexes. Use skills include: understanding the types of resources and the kind of information found in each, interpreting this information, selecting from it for one's own purposes, evaluating materials, and synthesizing ideas from various sources. The teaching of use skills should be recognized as the joint responsibility of teachers and librarians. Both location and use skills are closely connected to the reasoning and study skills elements of The Essential Learning Skills Television Project. (Author)

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Background Paper

Library Skills Instruction in the Fifth and Sixth Grades

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

by
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The Essential Learning Skills Television Project is a cooperative activity of state and provincial agencies, designed to strengthen learning skills instruction in American and Canadian elementary schools. It had its origin in a 1973-74 series of meetings of educators and educational broadcasters in the United States and Canada.

Organized and managed by the Agency for Instructional Television, the project is financed largely by the participating states and provinces. Exxon Corporation is supporting initial informational activities; the Corporation for Public Broadcasting has reserved funds to assist production.

The project undertakes to develop television and related printed materials that will enhance the teaching of communication skills, mathematics skills, and reasoning and study skills. This publication is one in a series of background papers prepared to help in the conceptualization of materials for the project.

This document was developed for The Essential Learning Skills Television Project. However, its content does not necessarily reflect the position or policy of the project.

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Library Skills Instruction in the Fifth and Sixth Grades

Abstract

Reflecting the new interest in individualized learning programs, the 1960's were a period of astonishing growth for elementary school libraries (or media centers). Because most school libraries, if they existed at all, were poorly equipped, emphasis was placed on quantitative goals (such as numbers of books) rather than qualitative goals (such as improved library skills instruction).

Though librarians have always recognized the need to educate users in the two broad areas of library skills—location of resources and their use—there is little research on how such instruction can best be done. Theories that do exist seem far different from actual practice. Both practitioners and writers agree on one point: library skills should be taught as they are needed *by the student. Whether this functional instruction should be "formal" or "informal" is a matter of debate among librarians.*

Location skills are invariably stressed by librarians in instructional programs. The main location tools are the card catalog, the library's classification system, and published indexes. Use skills include: understanding the types of resources and the kind of information found in each, interpreting this information, selecting from it for one's own purposes, evaluating materials, and synthesizing ideas from various sources. The teaching of use skills should be recognized as the joint responsibility of teachers and librarians. Both location and use skills are closely connected to the reasoning and study skills elements of The Essential Learning Skills Television Project.

Introduction

The term "library" is generally used in two different senses: the library is both a collection of books and the physical location of such a collection. Most librarians today would add some modifying phrases to the first part of this definition; they would be likely to say that a library is an *organized* collection of books *and other media* assembled with some extrinsic *purpose* in mind. In schools, the purpose is the direct support of the educational objectives and programs of the school. To fulfill this purpose, library personnel have as one principal responsibility the task of instructing students in the ability to locate, select, and effectively utilize library resources. How this is done, and how some members of the library profession would like to see it done, will be the subject of this paper.

In an Office of Education report for 1958-59, it was estimated that some two-thirds of the nation's elementary schools had no library at all (Gillespie & Spirt, 1973, p.12). Existing school libraries had collections that were sparse, shabby, and old; there was usually no professionally trained librarian. In a very real sense, the library was merely a physical location; it was some spare room, rather out of the

way, most often used as a study/detention hall. In contrast with our librarians' definition above, these libraries were unorganized, had no media besides books, and were assembled haphazardly with little thought of the school's programs.

And what of these programs? Before 1960, the typical elementary school was tied to textbook instruction; factual learning was stressed. A school library might provide a set of encyclopedias from which to copy. It might provide a few extra books for the child who had gotten ahead of the basal reader. The very nature of the school program kept the library on the periphery.

In the 1960's educational methods and objectives began to change. Individualized learning was stressed—the child was sometimes allowed to pace himself; learning to learn rather than memorizing facts became a goal; the one teacher-one classroom approach was modified with a variety of team-teaching approaches; it was realized that children learn in different ways, and the lock-step textbook approach was abandoned in favor of a variety of media and learning devices. The library, in whatever institutional setting, has always provided an environment and materials for individualized learning; it suddenly became an important factor in elementary schools.

Librarians responded to this challenge with the publication in 1960 of national *Standards for School Library Programs* (American Association of School Librarians). Quantitative standards were stressed in this document: pupils per library staff member ratios, materials per pupil ratios, space and room arrangements, and budgets. Educational goals were included, but given the sorry state of school libraries (and the frequent lack of them), emphasis had to be placed on amounts of books, audiovisual materials, space, staff, and money. Great impetus was given to the implementation of these standards by the Knapp School Libraries Project. The Knapp Foundation provided funds "to demonstrate the educational value of school library programs, services, and resources which fully meet the national standards for school libraries" (Sullivan, 1968, p. 6). The project basically consisted of finding eight school libraries that had made a start towards the 1960 standards, bringing them up to these standards, and turning them into temporary demonstration programs. When the Knapp Project got underway in 1963, project staff found it very difficult to find school library programs that had been working towards the national standards in any organized way.

Public money provided another push to school library development in the 1960's. Through Title II of the Elementary and Secondary Education Act of 1965, funds were made available for founding hundreds of new libraries, expanding collections, and hiring professional personnel.

With the emphasis so necessarily on quantity, little time could be devoted to the qualitative goals of school libraries. Librarians in

general have always realized the necessity of educating their users in the methods of finding and using library resources. School librarians have most often created their own curriculum guides for instructing pupils in library skills; during the 1960's, which became a period of astonishing growth in school libraries, many of these curriculum guides were published. Yet very little research was done on the educational bases or the effective use of such curricula. School librarians usually taught a detached course in library skills, based on their own feelings of what children should know. In a bibliography of research in school librarianship compiled in 1976, Freeman lists only four items under the heading "Teaching Library Skills" (p. 8). Two of these concern library skills in the fourth grade, one concerns ninth graders, and one concerns college students. In a comprehensive compilation of essays entitled *Educating the Library User*, published in 1974, editor Lubans includes among thirty-eight articles only three that directly pertain to elementary and secondary school students. Most of the emphasis is on the college student. In 1971, Rossoff wrote:

> The problem of teaching basic library skills to students has received scant attention in professional literature. The subject has been avoided perhaps on the ground that there is nothing complex or mysterious about it. It may be that librarians have been too occupied with the ordinary operations of the library to give much thought to their teaching obligations. In any event, there has been little formal research on the content of library instruction, the methods used, the relative effectiveness of the different approaches, or the benefits to be derived. (p. 69)

In writing this paper I talked with several school librarians and teachers, and read a number of curriculum guides. I was struck by the similarities among the guides in terms of content and progression. I might add that "guides" is certainly the proper term to describe these curricula; I found little in-depth development of objectives or specific ways to reach them. Several librarians indicated to me that they do not emphasize skills instruction above any other of their important tasks; nor do they question the types of skills to be taught, or find anything "complex or mysterious" about them.

In preparing this paper, I also read several books on school libraries; normally only a short chapter on library instruction is included. It quickly became obvious that theory is far ahead of, or at least different from, reality in school library instruction. For example, books that describe ideal school libraries state that flexible scheduling is essential to a successful program. That is, students should be allowed to come into the library, whether individually or in groups or classes, when they need to use library resources. Traditional scheduling usually allows for each class to visit the library once a week at a set time. If a school is encouraging individualized learning, it is obvious which type of schedule is preferable. Here is what three librarians told me about flexible scheduling:

We tried it but it didn't work. It was too disorganized.

We don't have flexible scheduling, but the children can come in during recess. Most don't.

Children can come in in groups up to three *if* they have a note from their teacher. Usually this is to answer some specific question. Otherwise we get too many kids in, and it's too crowded.

Principle as usual is quite different from practice; nor were any of these librarians especially displeased with this nonflexible aspect of their program.

Before I begin my discussion of library skills instruction in the fifth and sixth grades, I want to make one final point. I will be referring throughout this paper to school *libraries*, using the term to encompass what are now often called "media centers." Many librarians have taken over the organization, circulation, and use of audiovisual materials. This is a logical development in school librarianship, as it provides for the centralization of the processing and utilization of all instructional resources. In 1969, *Standards for School Media Programs* (revised) was published jointly by the American Association of School Librarians and the National Education Association's Department of Audiovisual Instruction. Librarians have come to realize that they are responsible for the organization and dissemination of knowledge and information regardless of the packaging, and that they have a responsibility to help students learn to use this knowledge and information in whatever form it appears. In an instructional television program on research skills, it would be advisable to use a term like "media center": not only is this name used more and more frequently, but it also implies an up-to-date view of library services.

An Overview of Library Skills

A school library provides a centralized collection of the resources needed in today's inquiry-oriented elementary school programs. A good collection makes it unnecessary for each classroom to house extensive materials; through centralization, duplication of materials and unnecessary expense are avoided. In the classroom, the child will see only a small number of books; in the library, he or she may be confronted with 10,000 volumes of books, as many as 50 different magazine titles, plus films, filmstrips, tapes, records, transparencies, and the equipment needed to use these audiovisual materials (Nickel, 1975, p. 5). One teacher told me that "children should get to muck around a lot in the library." However, when faced with this array of materials, the typical child may muck around to little avail unless first provided with some sort of orientation to or instruction in the use of the library.

Location and Use Skills

Definitions. Very basically, there are two broad areas of library

skills. The first area is *location skills:* the child must be able, for example, to use a card catalog to find a book (i.e., to find whether the library has it *and* where it is located) of which the child knows either the author or the title, or to find out what materials the library has on a given subject. The second area is *use* (often called *study*) skills: the child must be able, for example, to decide whether an atlas or an encyclopedia is more apt to solve a particular problem. There is much disagreement among librarians who write on this topic as to the school librarian's instructional role in the second area. Swarthout (1967) stresses that "the elementary school librarian has three definite instructional concerns—a literary concern, a study skill concern, and a library skills concern" (pp. 150-151). To Swarthout, study skills include such abilities as notetaking and outlining; her library skills are what I have called location skills. (I am not dealing in this paper with the "literary concern," which is in practice at least conceded to the province of the teacher; in this area, the library provides "enrichment" through storytelling and book circulation.) Swarthout points out that the first two concerns are primarily the teacher's, while the third is the librarian's.

The librarians with whom I spoke invariably stressed location skills in their instructional programs. They were somewhat more tentative about their approach to use skills. The problem is, of course, that classroom teachers have always tried to teach study skills, usually as part of the language arts, and librarians have found it difficult to work out a cooperatively planned approach to this curriculum area. In a book of case studies entitled *Problems in School Media Management,* Sullivan (1971) writes of "Miss Boscobel's struggle with skills." Before beginning her instructional lesson, Miss Boscobel, the librarian, tries to find out from a sixth-grade class just how much they know about using the library. She questions the students informally in the presence of their teacher, Miss Barre, who afterwards tells her, "It shouldn't be necessary for you to interrogate the children about what they have been taught in the classroom. I think you place them in a difficult position. They sense that you are in some way criticizing me, and they are embarrassed by it" (p. 5). Working librarians do therefore tend to stress purely "library" (i.e., location) skills, those skills that can be taught effectively, and are needed, *only* in the library.

Should location skills be taught? That we are undergoing an "information explosion," accompanied of course by a publishing explosion, is common knowledge. The sheer bulk of materials in libraries has increased the difficulty of finding any single item. At specialized levels of study, relevant and new research must be dug out of journals and unpublished reports; abstracts and indexes for such items are often put into computerized data bases. It is usually expected that the librarian/information specialist will locate materials at the user's request, because the user's time is better taken up with analyzing the material once he receives it. This idea is apparently trickling down to the elementary school, at least to those who write on

the topic. According to Davies (1969), "In the viewpoint of many school librarians the mere process of locating and finding materials in the school library holds little intellectual benefit for students, and time thus spent is generally wasted time" (p. 360). Rossoff (1971) writes that "the sum total of human knowledge is expanding at such an exponential rate that only specialists can cope with the retrieval process. Students should not waste their time looking for information when the body of knowledge has become so massive and the keys to its location so complex" (p. 69). These writers feel that librarians should concentrate on teaching use skills.

However a school librarian writing an editorial entitled "Library Skills: Now or Never" deplored the way in which students, rather than helping themselves, want librarians to find things for them: "There are many people today who apparently think it is the librarian's job to do such donkey-work as assembling data and checking facts" (DeSomogyi, 1975).

I feel that writers on both sides of this issue are underestimating the learning value of the location skills. In a later section I will talk more specifically about a variety of location skills, how they are taught, and how they can broaden educational goals. Practically speaking, in an elementary school, each student cannot hope to get personalized retrieval help from an often short-handed library staff. Nor is a student's request for a copy of a book quite on the same level of complexity as a researcher's need to search a large data base. Several librarians told me that their primary objective is to turn their students into independent library users.

Functional Instruction

One thing on which there is a consensus among writers and practitioners is that library skills instruction must be functional. That is, skills should be taught *as they are needed* by the student. Skills should not be a detached course of study, treated as any other in the curriculum, and graded. Davies (1969) wrote, "Library skills are means to other educational ends, and not ends in themselves" (p. 364). A basic problem is coordination of a functional program. If skills are to be taught as needed, flexible scheduling combined with small-group and individualized instruction is required; this is much harder to plan and implement than the once-a-week, large group instruction typical of the past.

In the fifth and sixth grades, it is common for students to be required to complete a short "research" paper. Library skills are essential to such an undertaking. Two librarians with whom I spoke had had quite different experiences with the annual term paper crisis. One, who describes the teachers in her school as "library-minded," is included in the planning and coordination of the term paper project. The sixth-grade students choose topics, with teacher guidance, for a 5-6 page paper. The teacher generally selects a very broad category from which the students can choose a subtopic; "animals" is done frequently in this particular school. The students are then

brought to the library daily for a two-week dose of library skills. The fact that the librarian knows the topic in advance enables her to assemble some pertinent materials and to design her instruction around the topic before the students descend upon her. During the two weeks, the students are also taken to their local public branch library and to the main library downtown. Library skills are mastered because of the necessity of applying them.

The other librarian had an experience that is apparently very common: two sections of sixth graders were sent into the library to do a paper on musical instruments, with no advance warning to the librarian. Aside from encyclopedias, she had on hand only two useful books. The children then straggled off to the public library, thinking their school library was next to useless. If the librarian knows the topic in advance, he or she is able to advise the teacher whether the topic can be handled adequately in the school library. Further, the librarian, in conjunction with the teacher, can decide whether there is enough variety of materials on a topic to make the term paper a useful exercise in inquiry and the development of study skills.

When television is used for library skills instruction, it is essential that the skills be shown as functional—as ways for students to find out something they want or need to know. School librarians who teach library skills as a detached course seem to do so only out of desperation and/or tradition. One rather cynical librarian spoke of her students "shedding skills like water off a duck as they walk out the library door." School administrators and faculty are beginning to realize that school libraries have more to offer than literary enrichment and another minor subject on the report card. This realization should be encouraged by showing, for example, *why* students are learning where the books on famous poets are located in the Dewey Decimal Classification scheme. They should be learning this because they need/want to learn something about famous poets. The fact that the books on famous poets are probably not all in one place is a peculiarity of the Dewey system, and is of no intrinsic interest to anyone but a librarian. Library skills are means to other ends.

Formal vs. Informal Instruction

Another aspect of the functional approach to teaching library skills is developed in the debate among librarians as to whether "formal" or "informal" instruction is more useful. Ahlers (1972) wrote, "We have glibly talked about library instruction integrated with classroom teaching, an informal approach, teaching skills as the need arises, etc., while in actual practice the prevalency of formal instruction in large groups is still evident, with an emphasis on what 'they' say children should know" (p. 23). Informal instruction takes place when a child exhibits a need to a librarian; as the librarian answers the child's question, he or she also teaches the child the necessary library skills. Librarians are in unanimous agreement that this is the type of learning that is remembered. Librarians seem most comfort-

able with this role; in institutional settings other than elementary/secondary schools, this is normally the only way librarians can instruct their users. (Some college librarians have set up more formal instructional programs.)

On one level it seems that informal instruction complements the functional approach. Children are taught what they need on the spot. However, an exclusive use of informal instruction neglects the cumulative building of library skills. "Skills come to be highly interrelated to each other, and to build elaborate internal intellectual structures of a cumulative sort. The learning of one skill aids the learning of other 'higher order' skills" (Gagné & Briggs, 1974, p. 13). To avoid the haphazard learning that can result from a strictly informal approach, school librarians have written curriculum guides that take the child from kindergarten through high school. Yet in many of these guides the skills do not build on each other from year to year. A skill introduced in the fourth grade is taught again in the fifth and sixth; librarians say the repetition is needed because the children forget. The problem is, of course, that the particular skill has not been tied into the entire curriculum in a meaningful way. Formal instruction, in the sense of being planned in advance, can be functional when it is designed with a team of teachers interested in integrating the school curriculum.

Some librarians with whom I spoke showed an intuitive understanding of the fact that skills build upon and enlarge one another. One librarian teaches the Dewey scheme to fifth graders because "they have the appropriate mind-set, just as the fourth graders have for the card catalog. They are eager and receptive." The fifth graders in her school have apparently mastered enough less complex skills, both library-type and other, so that the notion of classifying materials, and providing symbols to represent the classification, fits into their learning pattern and development.

Some librarians have sought to avoid the pegging of skills to grade levels by creating a formal instructional program through which children can proceed somewhat at their own pace. In *The Now Library Media Center: A Stations Approach,* librarian Margrabe (1973) has identified 96 library "aims"; a child keeps track of his or her progress on a record card, from grade one through six. The activities for each skill are structured for investigation and completion in a small group situation. Among the 96 aims, there are little clusters in which skills cumulate. However, it is interesting to note how much difficulty Margrabe has in integrating the audiovisual skills with the more traditional library skills. Here, for example, are her aims 69-75, a cluster of encyclopedia use skills (except for 73):

69. To find the guide words for pages in the encyclopedia on which are located certain entries.

70. To locate the page of an entry in any encyclopedia by using the guide word(s).

71. To use alphabetical entries and indexes to locate information in encyclopedias on a given subject and to guess other words under which the topic may also appear.
72. To gain a facility in using subheadings to locate information.
73. To learn to "dry mount" a picture or poster.
74. To evaluate critically encyclopedia information.
75. To evaluate "coverage" of an item in four different encyclopedias by making comparisons of a given topic. (pp. 112-117)

Whether instruction is formal or informal, the key is that the students want and need to learn the skills. It is a fact that despite the increasing presence of librarians in elementary and secondary schools, students continue to arrive at college without the library skills that they will so suddenly find themselves needing.

> Librarians in public and academic libraries are often convinced that there is absolutely no instructional program in library skills given to elementary and secondary students. Yet librarians at these levels have indicated in many surveys, even where shortcomings in many aspects of the library program are all too evident, that library instruction is their foremost and most successful activity. Perhaps a comparison might be made here to other study skills, particularly in grammar and spelling, which teachers of language arts teach from kindergarten through grade twelve with a similar criticism—kids can't spell or use correct grammar. (Ahlers, 1972, p. 23)

Location Skills

Location skills enable a library user to find and collect information with some efficiency. Use skills, which will be discussed in the next section, enable the user to get the most from the material he or she has assembled. The "material" in a modern school library includes both print and nonprint resources. Most school librarians provide the same cataloging (author, title, subjects) for nonprint materials as for print; the catalog cards for all materials are filed together alphabetically. I visited a librarian who has gone one step further and intershelved audiovisual materials with books whenever possible. Since nonfiction is generally organized by subject (the Dewey scheme), this means, for example, that all of this library's materials, print and nonprint, on astronomy are in one place.

By the end of the sixth grade, children should be able to use all the locational tools relevant to their school library. There are two types of finding tools: those that reflect a given library's resources, such as the card catalog, and those that are created outside the library and are useful only insofar as a given library has at least some of the resources for which the tool was made. *The Readers' Guide to Periodical Literature* is a typical example of the latter type; if a library doesn't have a good portion of its most important indexed periodicals, the *Guide* is useless.

Card Catalog

Alphabetization. A prerequisite skill to effective use of the card catalog is alphabetization. A student must be able to alphabetize by the interior letters of words; it is assumed that by fifth grade children know how to do this. Students must also understand how drawer labels work: librarians test this ability by showing several labels, such as A-Bac or Bad-Dag, giving students a list of words, and asking them to tell into which drawer each word would file.

Subject headings. The card catalog is generally introduced at the third- or fourth-grade level. Children learn that there are three basic types of cards—author, title, and subject— and that many items in the library are cataloged in all three ways. (Works of fiction are not normally given subject headings; magazines do not normally have authors.) It is a fact that "elementary children almost invariably begin to inquire for books by subject rather than author and title" (Lowrie, 1970, p. 107), and that subject cards cause children the most problems. Librarians do not usually make their own subject headings for books, but rather take them from published lists (or simply buy ready-made sets of catalog cards from commercial firms, whose catalogers also use these lists). Such lists make no allowances for local usage, and their terminology is often several years behind the times. The problem for library users is to convert their own terminology into that used by the list makers. The use of subject headings requires imagination; the user must think of as many ways as possible to look up a certain topic and then try the card catalog to see which terms are used.

In fifth/sixth grade the cross-reference structure of the catalog should be introduced; it is indispensable in solving the subject heading problem. "See" references direct the user from a term not used to the used term; for example, if a sixth grader wanted to do a paper on scuba diving, he or she might encounter a card in the catalog stating: SCUBA DIVING *see* SKIN DIVING (Sears, 1972, p. 474). "See also" references guide the user from a used term to related and subordinate terms; in the catalog under MYTHOLOGY there might be, in addition to the cards for the materials placed under this term, a card stating MYTHOLOGY *see also* FOLKLORE, GODS, HEROES (*if*, of course, these terms are used in the catalog).

In a classic catalog-use study conducted at the college level, Knapp (1944) found that the major problem in subject heading usage is that students tend to look up their topic under a broader term than necessary (p. 221). For example, a student who wanted information on World War II looked up WARS. Those who make subject heading lists try to be very specific in their choices; users must learn to use specific terminology when searching a topic. A child wanting to learn about cats who looks up ANIMALS in the catalog will find materials with much extraneous information.

Thal (1974) teaches his students about cataloging by having them catalog their own creative writing; nor is this a pointless exercise, since the cataloging they do is filed into the catalog, and their writing is added to the collection. It would be interesting to have the author and his peers choose subject headings for his work, then compare and analyze the different choices.

Descriptive information. Students at the fifth- or sixth-grade level should also learn to interpret the descriptive information on each card. This information describes the book as a physical package, as distinct from its subject content. Each card is a surrogate for items in the library; if the catalog card is understood, a person can reject certain materials without having to look at them. The date is an important clue to intellectual content, especially for science materials; "p." is the abbreviation for "pages"—length is important to children; "ill." means a book is illustrated; a term indicating format is given for nonprint resources.

Filing rules for card catalogs. Basically, card catalogs are arranged alphabetically. However, there are enough exceptions to this rule to require entire books of filing rules. Authors' names that begin with Mc or Mac are mixed together as if spelled alike. All surnames are filed before the same word used in another way: for example, "Black, Joseph" files before the title *Black Beauty.* The basic rule that inevitably fools library users is "word-by-word" alphabetizing, as opposed to "letter-by-letter." In telephone books, which are alphabetized letter-by-letter, disregarding spaces between words, "Newark" precedes "New York" because "a" precedes "y". In word-by-word filing, New York precedes Newark because the New of New York is a separate word. A single letter or shorter word precedes a longer word beginning with the same letter or letters. Here is an example of the order in which several titles file according to word-by-word alphabetizing: *I Met a Man, Images of America, In the Days of Giants, Inca.*

Two things can be expected of elementary school students in this area: 1) They should understand word-by-word filing; 2) they should understand that there are some apparent peculiarities in filing, and that they can seek help from a librarian. These rules are best learned informally as needed.

Library Classification

This discussion concerns print materials. Most librarians still keep audiovisual materials separate from print, and arrange them by format rather than content.

Organization of the collection. Elementary school libraries usually have separate shelving areas for "easy" books and "picture" books for children in the primary grades. All magazines are kept together. For children in the upper grades, there are four distinct sections: fiction, nonfiction, biography, and reference. Easy books, picture

books, and fiction are arranged alphabetically by author; biographies are arranged alphabetically by biographee. Reference books (encyclopedias, atlases, almanacs, etc.) may have no particular internal order, but are simply placed in the most visible and accessible location. Nonfiction is arranged by subject, typically following the Dewey Decimal Classification scheme. (I will refer to it as DDC.) By the time children reach fifth grade they should understand the location and internal organization of each section of materials, except perhaps the nonfiction section.

Types of library classification schemes. While there are many library classifications, only two are used in most American libraries. The DDC is used in virtually all school and public libraries and in many smaller college libraries. In the 1960's, many university libraries changed from the DDC to the Library of Congress Classification (LCC). LCC tends to be more detailed than DDC and is especially suitable for larger collections. Because it is extremely expensive to change classifications, it is unlikely that smaller libraries will do it.

Various classifications are constructed on different philosophical bases, but LCC and DDC are quite similar in their underlying principles. The classification symbols are different, of course, but once classification itself is understood it is easy to grasp new symbols.

Fiction and nonfiction. Prerequisite to understanding the Dewey scheme, a child must grasp the difference between fiction and nonfiction to know which books will be organized by subject and which by alphabet. Many librarians and teachers present this as a dichotomy, teaching that nonfiction is facts and fiction is "made up." However, in DDC, folklore (including fairy tales) is arranged with the nonfiction in the social sciences, and religious folklore is placed in religion; it is difficult to explain to a fifth grader why Greek myths and Bible stories are considered nonfiction. Dyer, Brown, and Goldstein (1970) suggest that "our acceptance of the neat pairing of the implied opposites 'fact' and 'fiction' does positive harm to our school libraries, because it obscures the true issues that are at stake in presenting books—especially to children . . . In novels, while the stories are not true, our enjoyment of them often depends on whether, as we say, they 'ring true'" (pp. 47-48). One librarian with whom I spoke emphasized how confusing the fact/fiction distinction is to children, and yet how essential to understanding present-day library organization.

Dewey Decimal Classification. The DDC is treated at two levels in the elementary school. At the basic level it is taught simply as a locational device. All the child needs to know is where to find the Dewey number on the catalog card, what the numbers look like, and how to read decimals. The child must learn that 636.15 precedes 636.2; Dewey exercises can be integrated very neatly with arithmetic lessons on this point. Many librarians use organized games, such as

who can find books on the shelves fastest, to teach the DDC. (One librarian told me that the only way to teach any of this "locational stuff" is with games; "otherwise it is deadly dull." She herself has published several games for teaching the DDC and the card catalog.) (Battle, 1977)

Many librarians choose to develop classification material at a more analytical level, and teach the meaning of the DDC as a means of finding material on a subject. Children will need to understand the ten main classes of Dewey, and how each can be divided and subdivided down to quite specific subjects. One librarian uses the following method with sixth graders:

> The children are asked to give the librarian a subject heading. The subject selected might be dogs. Now, any number in the hundreds is assigned as a general number for dogs. But, the children are told, when they read the book more carefully, they will discover that the book is only about dogs with black coats and that they must assign a decimal number to show this. When the discussion is complete, the chart may look like the following which was developed by one actual class:
>
> | | |
> |---|---|
> | Dogs | 634 |
> | Black dogs | 634.2 |
> | White dogs | 634.3 |
> | Fat dogs | 634.5 |
> | Fat, black dogs | 634.25 |
>
> Such an activity, of course, can be carried on at almost any length, but it should probably be continued only long enough for the children to see that each added number further limits the subjects. (Bowers, 1971, p. 84)

One popular way to teach the ten main classes of the DDC has been through some adaptation of the following table:

000	General Works	
100	Philosophy	Man thought
200	Religion	Man thought about God
300	Social Studies	Man thought about his neighbors
400	Language	Man talked with his neighbors
500	Science	Man discovered the world around him
600	Technology	Man made useful things
700	The arts	Man made beautiful things
800	Literature	Man wrote
900	Geography, history	Man made records of travel, people, events

(Lowrie, 1970, p. 111)

When children have a problem on which they are seeking information, they can try to find help on library shelves by fitting their problem into the scheme given above. Locating materials then becomes a high-level activity in thought processing. According to Christ (1972), "Library research skills involve the ability to transform problems or questions into meaningful, comprehensive symbolization through which the student may relate his questions to the symbolization used by the library in the organization of knowledge. . . . Education becomes a process of learning to learn by developing the skill of articulating the problems rather than the answers" (pp. 95-96).

Published Indexes

Published indexes are the second type of finding tools, those created outside of a given library. If a school has a reasonably good collection of *National Geographic* magazine, for example, students can learn to use the *National Geographic Index*. *The Readers' Guide to Periodical Literature* has been mentioned; there is also the *Abridged Readers' Guide,* which indexes some 40 magazines of general interest. There are indexes to short stories, poetry, and fairy tales, among many others. There are two basic problems in the use of these indexes. First is the frustration that can result if too many of the indexed items are not available in the library. Second is the recurring problem of ascertaining the subject headings used in each index. "The inconsistency in the various tools of research does not make it any easier. *The New York Times Index* uses DRUG ADDICTION but the *Readers' Guide* prefers NARCOTIC HABIT. On the subject of prayers in the schools the *Readers' Guide* uses PUBLIC SCHOOLS AND RELIGION. *The New York Times Index* entry for this topic is RELIGIOUS PRACTICES IN PUBLIC SCHOOLS, ISSUE OF" (Rossoff, 1971, p. 76).

Conclusion

In 1972 Golden V. Adams, a library science student at Brigham Young University, completed a study of "library attitudes, usage, skills, and knowledge" among junior and senior high school students in Oregon. Adams discovered a large discrepancy between "estimated usefulness" of certain library tools, and actual use of them. For example, 50% of the respondents rated the card catalog as "very useful," and only 5% said it was "of little use." Yet only 9% said they used it "very often," just 25% said they used it occasionally," and the rest said they used it rarely or not at all. Many respondents realized that the card catalog is a finding tool, but said they generally found things by browsing. Of the 401 students in the study, 207 had attended a formal class in library skills. It is evident from Adams's study that these classes did little more than create some appreciation of, and perhaps some rather passive knowledge of, the library. On the skills portion of the questionnaire the students did very poorly; for example, only 21% correctly answered a question on filing order in the card catalog.

While school librarians can often give quite an impressive list of the skills children have been taught by the end of the sixth grade, it seems that most of this learning doesn't stick. The basic location skills are not difficult, yet many students arrive in college without them. Therefore it should be stressed to elementary school children that these skills are not unique to their particular library, that they are transferable to other, and much larger, libraries. A junior high school librarian listed nine things that "every seventh grader should know about libraries" (Smith, 1972, p. 7). One of the nine is to know a system of arranging books; she feels it doesn't have to be DDC, for when students have a basic grasp of one system they seem to be able to understand another quite easily.

In virtually all of the search tools mentioned in this chapter, the problem of formulating useful subject headings/key words arose. Several essential abilities are involved in this process: the ability to pin down a topic very specifically, the ability to discriminate between topics, the ability to think of synonyms and related terms. It is important to be able to move between broader and narrower terms; for example, a student doing a project on ice hockey needs to understand that if he or she doesn't find that subject in the school's card catalog, it doesn't mean the library has nothing on the topic, but rather the library has no one book completely devoted to ice hockey. (If a librarian has provided analytics—complete cataloging for important parts of books—a user might find an entry under ice hockey for a chapter on the subject that appears in a more general book.) If ICE HOCKEY is not in the catalog, the student needs to think more broadly, to move up to WINTER SPORTS; if that doesn't work, the student should try SPORTS. The ability to use the subject approach in libraries is perhaps the most important location skill, yet the most complex.

Use Skills

What are use skills? Use skills enable the user to get the maximum learning out of materials he or she has assembled. Resource use skills include the following: understanding the types of resources and the kind of information found in each (dictionaries, encyclopedias, atlases); the interpretation of information in each type of resource (for example, how to read maps and charts or how to read diacritical marks in a dictionary); selection of information needed for one's particular purpose (especially, how to take notes); evaluation of materials (date of publication, author's reputation); synthesizing information/ideas from various sources (this ability is generally reflected in communication, whether written, spoken, or pictorial).

Resource use skills are an important part of the broad spectrum of study skills, "the tools the learner uses in his pursuit of conceptual learning" (Davies, 1969, p. 201). In The Essential Learning Skills Television Project, emphasis is being placed upon the development

of critical thinking abilities. Critical thinking is a natural response to some "perceived discrepancy" (ELS Report No. 5A, Note 1, p. 2). The result is a judgment concerning the discrepancy. The ability to use (read, listen to, view), synthesize information from, and evaluate resource materials is a factor in the development of critical thinking. Further, it is a factor we can define, isolate, and design instructional lessons around. As Gagné and Briggs (1974) pointed out, such abilities as critical thinking are "internally organized" (p. 48), and we can only go so far in teaching this ability to students.

Teaching use skills. Instruction in these skills should be recognized as the joint responsibility of teachers and librarians, and an integrated curriculum involving both classroom and library should be planned. Most often this has not been done, partly because teachers and school administrators have failed to recognize the importance of the library's multitude of resources in the development of study skills. The librarian's contribution has usually been incidental, in a spontaneously arising situation: one librarian tells of a group of fifth graders who were studying the Middle Atlantic states. The students noticed how much the population figures in the encyclopedia and the almanac differed. The librarian then discussed with them the meaning of copyright dates and the frequency of the census. She emphasized checking the accuracy of facts and figures through the use of more than one reference (Lowrie, 1970, p. 109). In their classroom the students might have had only one textbook on this subject, with one set of population figures; in the library there were a number of resources with the same information. Thus the librarian was able to help the students understand that published materials must be evaluated and not just accepted at face value. Students need to learn to look in books for evidence, not answers.

In schools where the library is beginning to assume a central place in learning, its name has often been changed to "learning center." In the literature it is often referred to as a learning laboratory. I would like to give some examples now of ways in which the library has been used as a learning center for important study skills. Generally the context is that of doing a short research paper. Most of the curriculum guides I looked at showed the research paper as an important part of sixth-grade learning: one guide states that sixth graders will begin to "develop an approach to research" (Schwarz, 1976) through selecting a sufficiently limiting topic, locating material, selecting resources, taking notes, and making an outline. Christ (1972) enlarges upon and generalizes this idea of developing an "approach to research": "Research skills enable persons to develop the ability to formulate appropriate questions regarding problems in their environment, to develop methodologies for researching these problems, to develop the bibliographical abilities required to discover what others have found out about the same problem, and to actually carry the research through to a conclusion" (pp. 81-82).

Margrabe (1973), in a teaching kit entitled *The Now Library Media*

Center, has developed discrimination exercises for helping children understand that "each tool has its own use" (p. 126). For example, five reference books are shown: *Webster's Biographical Dictionary, Junior Book of Authors, Webster's New Geographical Dictionary, Current Biography,* and *Information Please Almanac.* Six problems on topics are given: 1. the population of Canada, 2. the pronunciation of Tanzania, 3. the production of nuts in the U.S., 4. why Ferdinand Victor Eugene Delacroix is famous, 5. whether Roger Duvoisin is still living, 6. whether Trini Lopez wears a beard. Students choose which tool or tools will be the greatest help in finding the information. (Answers: 1. 3, 5; 2. 3; 3. 5; 4. 1; 5. 2, 4; 6. 4)

Margrabe has also developed an exercise in which students read the coverage of one topic in two different magazines (or newspapers), and then make a list in which they compare and contrast the two sources in terms of length, viewpoint, facts (including whether the article is strictly confined to facts), opinions given, etc. (p. 131). In her kit, Margrabe includes exercise sheets that can be duplicated for instructional use.

Notetaking ability is developed through many types of exercises. Students usually have a hard time with this; they begin to copy as soon as they begin to read. One librarian asks the children to write down only what will be important to remember three weeks later. The best method I've encountered is what its creator calls her "comparative method" (Okuma, Note 7) of notetaking. She uses it with small groups of fifth and sixth graders who are engaged in independent study. The children find and read all the versions of *The Three Little Pigs* in the library. Before they begin, they label several large note cards individually with "First Pig," "Second Pig," "Third Pig," "Mother Pig," "The Wolf," "The Houses," etc. As they read each version, they list on each card what is relevant to that point *and* different from the versions they have already read. When there are no more differences to record, the notetaking is finished, and an outline is half done too.

After the information on a selected topic has been gathered, sifted, and organized, the final step is to present it. This is generally done through a written paper, but in some modern libraries children can choose to make an audiovisual presentation. I visited one large private school with a well-equipped "learning center" in which the librarian emphasizes what she refers to as "production." At this school, the entire library instruction program is tied into the classroom curriculum. In the sixth grade, for example, American history is a major topic. In the learning center, the librarian used a lesson in which students learned the value of historical fiction in understanding history. After reading a particular novel about a dollmaker during colonial times, children went to reference books for more information on how dolls were made. They found a book with such good, clear illustrations of handmade dolls that they wanted to share them with the rest of their class. They were able to use their production

center to make and label transparencies to show in class. During the labeling, the librarian was able to insert an informal lesson in the choice of key facts and information from a text.

Some children may find that they can express themselves better through an audiovisual presentation than through writing. The 88th exercise in Margrabe's kit is the use of a cassette tape for organizing information. She suggests that "this station may be done by some who could not do 85, 86, and 87" (making a bibliography, taking notes, and making an outline) (p. 130). Unfortunately audiovisual production in school libraries is not yet widespread. One librarian told me she was afraid the students would wreck the equipment. In the Montgomery County, Maryland, *Instructional Objectives for Media Research Skills* (cited in Gillespie & Spirt, 1973, p. 43), the production section, which in grades four-six includes constructing a model story book, making a transparency, and making a tape recording, is labeled *optional.*

Some elementary schools have initiated independent study programs. Such programs seem particularly appropriate for the fifth and sixth grades, where children's learning skills and physical development are apt to vary widely. Eichorn has termed the 10-14-year-old a "transescent," for whom "the traditional lecture-recitation method must give way to more appropriate methods involving seminar and individually directed learning experiences" (cited in Lubans, 1974, p. 26). The modern school library normally assumes a central role in independent study projects; the library becomes the laboratory in which a student can explore and develop ideas at his own pace. A school that participated in the Knapp School Libraries Project, Central Park Road School in Long Island, New York, considered the encouragement of independent study a major goal (Sullivan, 1968, p. 45). At the conclusion of the project, faculty members filled out a reaction questionnaire. One of the questions was: "What phases of library service have been most helpful to your classes?" Independent study was ranked first in a list of nine.

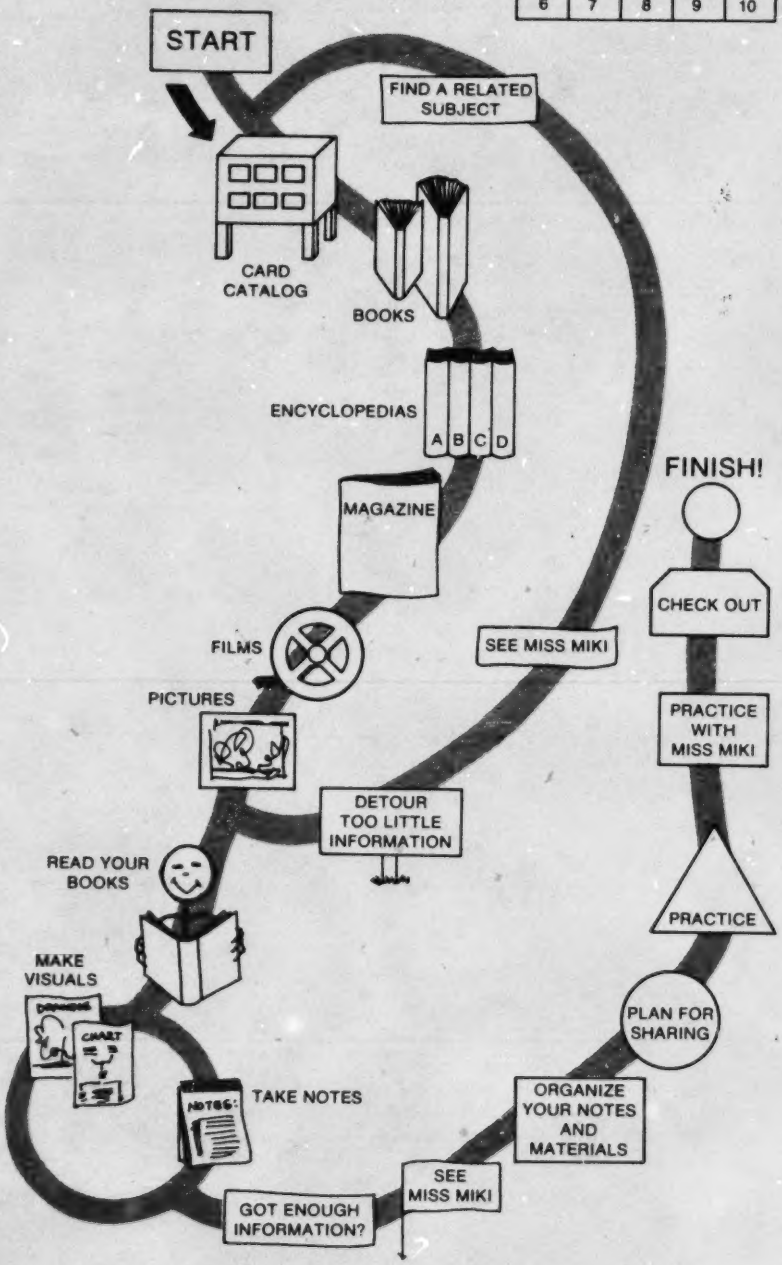
Kahala Elementary School in Honolulu began an independent study program in the late 1960's. "The primary objective of the program is to develop the individual capacities of each learner through self-selected and self-directed activities in any field of interest, through the provision of guidance, suitable environment, equipment, and materials" (Edling, 1969, pp. 1-2). At first the program had a coordinator whose sole function in the school was the administration and guidance of independent study, but the school's librarian has since assumed this role. Basically, a student chooses a topic he or she would like to explore, researches it, synthesizes the information, and makes a formal presentation to the class. During the period a student is working on the project, usually two-three weeks, he or she is excused from classroom assignments. The librarian gives the student general guidance, plus specific help in location and use skills as needed. A copy of the diagram on page 19 is given

Kahala School
Independent Study Program

NAME _____

DAYS IN INDEPENDENT STUDY

1	2	3	4	5
6	7	8	9	10



Kahala School
Independent Study Program

SUBJECT INTEREST SHEET
(Worksheet #1)

Student's Name _____ Grade _____ Room _____

Please fill out the following as completely as you can. It will help you in your Independent Study.

1. Have you ever been in Independent Study before? Yes _____ No _____

2. I want to study about _____

_____

3. I already know these things about my subject: _____

_____

_____

_____

_____

_____

_____

_____

_____

4. I want to find answers to these questions about my subject:

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

5. When I use reference materials such as encyclopedias, the card catalog, tables of contents, indexes, etc., I might be able to find some information about my subject by looking under the following words or headings: (List a few to begin with. Add more as you think of them.)

_____ _____ _____

_____ _____ _____

_____ _____ _____

to each participant for guidance. The worksheet on page 20 is intended to help the student clarify objectives and get started; the librarian told me that students occasionally fail to distinguish between items 3 and 4 on the worksheet. That is, they cannot sufficiently limit their topic to state clearly what they want to explore. Often they have already explored this topic on their own, and they need guidance in choosing a new aspect, or in understanding how to deepen their knowledge of it. Item 5 is important in initiating the search aspect of the project; I have discussed how difficult it is for students to choose subject headings and to think of possible alternatives.

The student who can successfully initiate and carry through to conclusion an independent project has come a long way towards mastering "an approach to research." As one educator put it, this child is becoming "a person who can select from the confusion of life and knowledge that information which serves his purposes and who can bring it to bear on his many tasks" (Davies, 1969, p. 208).

The Image of the Library

A basic reason that school libraries have tended to remain on the periphery of the educational process is the negative image of libraries and librarians. While writing this paper I heard and read numerous bitter complaints from librarians, particularly concerning faculty attitudes. "Instruction in library skills should figure prominently in the syllabus, but, in the face of faculty indifference, students cannot be expected to take it seriously" (DeSomogyi, 1975, p. 37). One librarian told me that teachers actually put down school libraries and send their children off to the public library. She said these same teachers will not take the time to work with her on materials selection for the library.

In 1961 Saad el Hagrasy completed a doctoral study in which he "established a positive relationship between teachers' backgrounds in library skills and reading and their students' achievements in these areas" (cited in Swarthout, 1967, p. 19). However, it would seem that most teachers who themselves possess library skills have not learned them in teacher education courses. Looking back on my course work for a master's degree in elementary education in 1970-71, I cannot remember any references being made to school libraries. In a study entitled *The Library Image as Presented in Selected Teacher Training Textbooks in Use in the State of Kentucky*, Saddler (1970) found, for example, that 16 of the 26 texts used in basic education courses made no reference to libraries whatsoever. In the books that did mention libraries, "what emerged was not a dynamic service organization . . . but a shabby insignificant place where teachers might find some supplementary materials . . . library services were just as apt to be lumped with the hot lunch program and transportation services as with the curricular program of the school" (pp. 75, 78).

Part of the problem lies with librarians themselves, of course. Librarians constantly argue over the proper objectives of librarianship. Some still do prefer to see themselves as keepers of the books and would not welcome a more active role in teaching and curricular development. One fifth-grade teacher who has worked with two different school librarians told me that she would have "loved it" had either librarian held a seminar for teachers to suggest projects the teachers could develop to more fully utilize the library. A key problem is the lack of communication between librarians and teachers; librarians who are trying to expand their role should assume the responsibility for communicating this to faculty and administrators.

The Essential Learning Skills Television Project could do libraries (and thus schools) a great service simply by depicting libraries as interesting, exciting, "with-it" parts of the school. This would be educational for both students *and* teachers. A primary point to be stressed would be the individualized attention available in the library. As Rossoff (1971) wrote: "The library is one place in the school to which children may go without an appointment and know that attention will be paid—where an adult will be present who will listen, and who will not judge or criticize. This concern for the individual child is the unique commitment of the school librarian. . . . librarians make themselves visible on the floor of the library where they can be approached and collared" (p. 10). As I interviewed several librarians for this paper, I noticed how each of them knew the names of the children coming for help, advice, or just to chat; the librarian is one of the few teachers the child has for all six years of elementary school.

Television could also depict a situation in which a librarian and a classroom teacher are cooperatively working on a particular project. Many library use skills have traditionally been taught by teachers as part of the language arts curriculum; an obvious example is the use of a dictionary. One curriculum guide for library skills is presented in two columns: one column lists the librarian's responsibilities at each grade level, the other column lists the teacher's responsibilities. By the fifth and sixth "reader levels," the two columns are practically identical (Dade County Public Schools, Note 5). If the teacher and the librarian do not cooperate in deciding who shall teach which skill, the result will be confusion, inefficiency, and perhaps competition.

It is also apparent that many teachers do a relatively poor job in teaching use skills. One librarian reported that "students are pathetically surprised" when they begin to learn the wealth of libraries; she particularly mentioned dictionaries and encyclopedias on special subjects, such as *The Encyclopedia of Sports*. Teachers are typically quite unaware of such resources.

Many school libraries still are "shabby, insignificant places," but

many more are shiny new facilities, professionally staffed and filled with up-to-date books, periodicals, and audiovisual materials and equipment. The Essential Learning Skills Television Project could depict the most modern type of library learning center as an "encouragement" to those school administrators who have failed to acknowledge, with adequate funds, the importance of library services.

An important element in most library skills curricula is what is variously called library etiquette, library manners, care and handling of books and equipment. I work in a university library where theft and mutilation of materials are constant problems; it would seem that the lack of respect for libraries *per se* applies also to the materials in them. Television might show the typical case of a student who, after a long search, locates a needed magazine article only to find that several crucial pages have been torn out. Since some fifth and sixth graders may be rather rebellious and anti-establishment, it is better to show the effects of mutilation in terms of a student's frustration rather than in replacement costs to the library.

Blau (1972) spoke of the need to demonstrate that the librarian is not a "Cerberus guarding the doors of the library" (p. 67). Whatever television can do to change this image will be highly beneficial to the improvement of school library services.

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Additional copies of this and other background papers prepared for The Essential Learning Skills Television Project are available from the Agency for Instructional Television, Box A, Bloomington, Indiana 47401. For each copy requested, enclose fifty cents to cover the costs of postage and handling.

Other papers available:

Coping in the 1980's: Inquiry Skills and Participation in Decision-Making for Fifth and Sixth Graders, by Byron G. Massialas, Professor of Education, Florida State University.

Essential Learning Skills in the Education of Citizens, by John J. Patrick, Associate Professor of Education, Indiana University, and Richard C. Remy, Associate Professor of Political Science at the Mershon Center, The Ohio State University.

Teaching Mathematics: An Integration of Skill and Knowledge, by Philip Peak, Professor of Education, Indiana University.

Communication, Fifth and Sixth Graders, and The Essential Learning Skills Television Project, by Mary Lou Ray, Language Arts Coordinator, Mississippi Educational Television Authority.

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